

SN 09/995,304
Docket No. S-94,769
In Response to Office Action dated March 22, 2006

REMARKS

Applicant appreciates the courtesy shown by the Office, as evidenced by the Office Action mailed on March 22, 2006. In that Office Action, the Examiner rejected Claims 1-16. Claims 17-63 were previously canceled. As such, Claims 1-16 remain in the case with none of the claims being allowed.

The March 22 Office Action has been carefully considered. Applicant respectfully requests reconsideration of the Application in light of the remarks presented herein.

Rejection under 35 U.S.C. §112

Claims 1-16 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner states that there is not support in the specification for "a second magnetic field" of the limitation incorporated in the previous Amendment, filed January 30, 2006, to Claim 1. The Examiner has requested that the Applicant provide support for such component.

Applicant submits that support for the above-referenced amendment is found not only in Figure 1, but also on page 11, line 18, through page 13, line 23, of the specification, which describes a particle field fractionation device (10 in figure 1) having a first magnetic field, generated by magnetization coils, and a "second magnetic field" generated by a spectrometer magnet.

Applicant submits that the first magnetic field is generated by magnetization coils (i.e., magnets) 12 before flowing into a spectrometer chamber. See Figure 1 and page 14, lines 23-24. In one embodiment, magnetization coils comprise a series of pulsed solenoid magnets, and the peak field of magnetizing coils/magnet 12 is chosen to assure magnetization of the particles. See page 12, lines 7-11.

Applicant submits that the "second magnetic field" referred to by the Examiner is generated by spectrometer magnet 18, located in spectrometer chamber 14, which is used to capture and collect magnetic microspheres according to their magnetic moment. See Figure 1; page 11, lines 24-27; and page 13, lines 22-23, of the specification.

The magnetization field generated by magnetization coils 12 is shielded from spectrometer chamber 14 – and thus spectrometer magnet 18 – to prevent the field generated by

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the spectrometer magnet 18 (i.e., "the second field") from interfering with particle motion before the particles enter spectrometer chamber 14. See page 13, lines 3-7, of the specification. Thus, the first magnetic field generated by magnetization coils/magnets 12 is separate and distinct from the second magnetic field generated by spectrometer magnet 18.

Applicant submits that, because both the specification and Figure 1 provide support for the limitation of a "second magnetic field" incorporated into Claim 1, the rejection of Claims 1-16 under 35 U.S.C. §112, first paragraph, is successfully overcome.

Rejection under 35 U.S.C. §102(b)

Claims 1-7 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Miltenyi (U.S. Patent 5,543,289).

Applicant submits that independent Claim 1 was amended in the Amendment filed January 30, 2006, to recite the limitation that the magnetic microspheres pass through a magnetic field to a chamber and a collector in which magnetic microspheres having different magnetic moments are separated in the presence of a second magnetic field according to their respective magnetic moments. As previously presented, support for this amendment is found in Figure 1, and on page 11, line 18, to page 13, line 23, of the instant Application.

Applicant submits that, in order to anticipate under §102, a reference must teach every element of the claimed invention. Accordingly, Applicant submits that Miltenyi does not teach all of the elements of Claim 1.

Applicant submits that Miltenyi does not teach passing magnetic microspheres through a magnetic field to a chamber and a collector in which the magnetic microspheres are separated in the presence of a second magnetic field. Instead, in Figure 1 and column 10, lines 38-47, Miltenyi teaches the introduction of particles into a chamber 11 disposed "between the poles of a magnet 12 (i.e., within a magnetic field)" and filled with a field-intensifying matrix 13 that collects the magnetized particles. The magnetic particles are retained on matrix 13 within the chamber 11 (and, therefore, within the magnetic field), and do not pass through the magnetic field. As the reference states in column 10, lines 45-47: "When the magnetic field is applied, the [magnetic] gradient is created and suitably magnetically labeled samples *are retained in the chamber* (emphasis added)."

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On page 6 of the March 22 Office Action, the Examiner states that, because Miltenyi teaches that the magnetic microspheres are eventually eluted from the chamber, it is inherent that the magnetic particles are passed through a chamber and a collector. Applicant submits that the reference does not teach that the magnetic microspheres pass thorough a chamber and a collector in which the magnetic microspheres are separated in the presence of a second magnetic field.

Applicant further submits that Miltenyi does not teach the separation of magnetic microspheres having different magnetic moments in the collector. The reference instead teaches that the separation of magnetic materials such as cells, proteins, polysaccharides, and other biological material from non-magnetic materials. See column 4, lines 14-37, of the reference. Rather than having different magnetic moments, the magnetic materials described by Miltenyi have uniform compositions with homogenous magnetizations. See the Abstract of the reference.

Applicant therefore submits that, because the reference does not teach all of the limitations of Claim 1, the rejection of the claim and those claims dependent thereon under 35 U.S.C. §102(b) as being anticipated by Miltenyi is therefore successfully overcome.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miltenyi in view of McDevitt et al. (U.S. Patent 6,649,403).

In order to establish a *prima facie* case of obviousness, the combination of references cited by the Examiner must either teach or suggest all of the limitations of the claimed invention. Applicant submits that, as previously presented herein, Miltenyi does not teach passing magnetic microspheres through a magnetic field to a chamber and a collector in which magnetic microspheres having different magnetic moments are separated in the presence of a second magnetic field according to their respective magnetic moments. Applicant submits that Miltenyi also does not suggest this limitation. Furthermore, Applicant submits that McDevitt et al. as well neither teaches nor suggests this limitation. Therefore, the rejection of Claim 8 under 35 U.S.C. 103(a) as being unpatentable over Miltenyi in view of McDevitt et al. is successfully overcome.


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In light of the amendments and remarks presented herein, Applicant submits that the case is in condition for immediate allowance and respectfully requests such action. If, however, any outstanding issues remain unresolved, the Examiner is invited to telephone the Applicant's counsel at the number provided below.

Date: June 20, 2006

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Respectfully submitted,


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